PATENT 10/039,956

## CLAIM AMENDMENTS

## 1. CANCELLED

OK to Enter (2 to 15. CANCELLED S, 27,05 TN) 16. (Currently amende a) obtaining

- 16. (Currently amended) A method of screening a substance, comprising:
  - a) obtaining a composition comprising undifferentiated hES cells proliferating on an extracellular matrix instead of feeder cells, in a medium conditioned by fibroblast feeder cells;
    - b) differentiating said hES cells:
    - a) c) contacting a population the population of differentiated cells with the substance;
  - b) d) determining any phenotypic or metabolic change in the cell that results from contact with the substance, and
  - e) e) correlating the change with cellular toxicity or modulation + wherein the differentiated cells-are obtainable by-growing human embryonic etem (hES) cells on an-extracellular matrix inclead of feeder cells, but in a medium conditioned by fibroblast-feeder cells, and then causing or permitting the hES cells to differentiate.

## 17 to 36. CANCELLED

- (Currently amended) A method of screening a substance, comprising:
  - a) obtaining a culture of a composition comprising undifferentiated pPS cells proliferating on an extracellular matrix instead of feeder cells, but in a medium conditioned by fibroblast feeder cells:
    - b) optionally causing or permitting the pPS cells to differentiate; then
    - c) combining the cells with the substance; and
    - d) determining any effect of the substance on the cells.
- 38. (Previously presented) The method of claim 37, wherein the extracellular matrix upon which the undifferentiated pPS cells are cultured is Matriget® basement membrane matrix, laminin, or collagen.
- 39. (Previously presented) The method of claim 37, wherein the cells are undifferentiated when contacted with the substance.
- 40. (Previously presented) The method of claim 37, wherein the cells have been caused or permitted to differentiate before being contacted with the substance.